

### **Casa Grande Ruins National Monument**

Resource Protection Study

November 2003



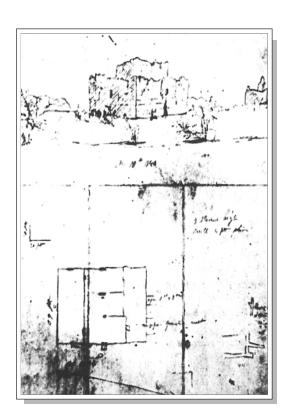
Casa Grande Ruins was established as a national monument in August 1918 and reserved for protection as early as 1892. The monument is named for the Casa Grande (Great House), a four-story structure constructed by the Hohokam people who inhabited the area from 500 to 1400 A.D. The monument preserves the building and related sites, including a ballcourt, foundations of other ruins and trash mounds that were used by the Hohokam during the Classic period, from 1175-1450 AD. Casa Grande Ruins is centrally located in Pinal County between Arizona's major metropolitan communities of Tucson and Phoenix and within the city limits of Coolidge, Arizona.

The Great House ...is just one part of an entire irrigation community that existed along a single canal during the Hohokam Classic Period

At right, 1846 Sketch of the Great House

### Prehistoric Community Discovered On Sites Near Casa Grande Ruins

Over the course of more than a century, Casa Grande Ruins has been protected as a reservation and then national monument. The same cannot be said for many of the archeological sites that are located outside the monument boundaries. And while the Great House has always been the focus of preservation because of its integrity and uniqueness, the structure was just one part of an entire irrigation community that existed along a single canal during the Hohokam Classic period. Sites related to Casa Grande Ruins stretch along the canal east of Florence to Coolidge, and have been impacted by construction of canals, highways, prisons, modern irrigation agriculture and development and expansion of the towns of Florence and Coolidge. In recent years, these development pressures have become more intense. In particular, new businesses have been constructed immediately across from the entrance of Casa Grande Ruins,



including a Safeway, Wal-mart, Blockbuster Video, and a Taco Bell/KFC restaurant.

### Concervancy Acquires Area Properties; Expresses Interest In Selling To National Park Service

Development of this land has raised concerns about the protection of archeological resources related to the Hohokam settlement at Casa Grande Ruins National Monument. In response to these concerns, Wal-Mart shifted the location of its building within the boundaries of its property and donated 13 acres to the Archeological Conservancy, a private organization that purchases archeologically-important sites to protect them from development. The Conservancy also has acquired two parcels that contain significant archeological resources from a Hohokam settlement known as the Casa Grande-Grewe Community. The Conservancy has indicated a desire to sell its holdings to the National Park Service for inclusion in Casa Grande Ruins National Monument.

### **Public Comment Guided Scope Of Study**

To determine whether land ought to be added to national park units, the National Park Service conducts "resource protection" studies that examine existing boundaries and consider whether other resources should properly be included in a park's boundaries. At Casa Grande Ruins, that study was commenced in March 2001. Following public meetings, the park service determined that the scope of the study would include archeological sites along the prehistoric Canal Casa Grande that were occupied during the same time period as Casa Grande Ruins, that is, during the Hohokam Classic period, or were otherwise related to the irrigation community at Casa Grande Ruins.

Once the scope of the study was determined, it was then up to park service staff to determine exactly which lands to consider. Excluded from the study were:

- sites that have already been destroyed or significantly disturbed;
- sites that park service archeologists were unable to obtain permission to visit, either because access was denied or no response was received from affected landowners:
- sites that were not feasible to visit because of the low probability of significance;
- sites that landowners indicated would not be available for sale.

Following National Park Service guidelines, park service staff examined resources adjacent to Casa Grande Ruins and those identified for study along the Coolidge-Florence corridor to determine whether the resources are:

- **significant to park purposes** or create new opportunities for public enjoyment; or
- are necessary for management or operational purposes; or
- are necessary to protect park resources that are critical to fulfilling the park's purposes.



Aerial photo of Casa Grande Ruins in the 1930s

Additionally, park service staff examined properties that met any of the above criteria to determine whether:

- the lands are feasible for the National Park Service to administer; and
- other options for their protection are not adequate.

### **Properties Reviewed In Resource Protection Study**

As the Resource Protection Study unfolded, it became clear that certain properties were of utmost significance because of their relationship to Casa Grande Ruins, their archeological significance and their potential for acquisition on a willing seller basis. Consequently the study focused on the following properties:

- Agricultural land (known as the **west boundary property**) adjoining the Ruins that is available on a willing seller basis, contains significant archeological resources and has been the subject of development proposals that could negatively affect the visitor experience at Casa Grande Ruins. The landowner is anxious to sell his property and is open to acquisition of the land by the United States.
- NPS acquisition from the Bureau of Indian Affairs of the so-called Horvath site, a 7.4 acre site that includes significant artifacts from the Classic period, including roasting pits, human burials and cremations, adobe walls, pit houses and canals. The land lies opposite Casa Grande Ruins' northeast border.
- Properties owned by the Archeological Conservancy that are known as the Grewe site. The Grewe site was not inhabited during the same time period as Casa Grande Ruins, but Casa Grande was developed as settlement moved west from Grewe toward the Ruins. The two sites are estimated to cover approximately 2 square miles, half of which is preserved within the current boundaries of Casa Grande Ruins. Excavations carried out by Northland Research between 1995 and 1997 revealed a large residential district at Grewe where hundreds of houses were located. Grewe was listed on the National Register of Historic Places in 2001.
- State trust lands (known as the **Adamsville site**) that contain the Adamsville Ruin, a large housing complex located at the intersection of Highway 287 and Adamsville Road. The site is named after the 19th century town located about 1/2 mile north of the site. It is the second largest Hohokam housing area along the Canal Casa Grande, second only to the combined communities of Grewe and Casa Grande. The entire site is approximately 155 acres, 80 percent of which is owned by the state. Adamsville was listed on the National Register of Historic Places in 1990.

...the State of Arizona supports the efforts of the National Park Service to protect irreplaceable natural and cultural resources ... through park expansion.

Gov. Janet Napolitano in a letter to Casa Grande Ruins Superintendent Don Spencer, April 14, 2003

### Park Service Considers Alternatives for Expansion

- Alternative 1 is a "no action" alternative that involves small land transfers between the Bureau of Land Management, the Bureau of Indian Affairs and NPS that would result in Casa Grande Ruins receiving 4.5 acres at its southwest boundary in exchange for 3.75 acres along the south boundary to allow for widening of the Pima Lateral canal, as well as transfer of the 7.4 acre Horvath site to NPS from BIA.
- Alternative 2 calls for completion of the federal land transfers between NPS and BIA and BLM, and acquisition of 80 acres of the west boundary property from a willing seller.
- Alternative 3 calls for completion of the federal land transfers, acquisition of 80 acres of the west boundary property and acquisition of the Archeological Conservancy's Grewe site holdings.
- Alternative 4 calls for completion of the federal land transfers, acquisition of 80 acres of the west boundary property, acquisition of the Grewe site and approximately 125 acres of the Adamsville site that is state trust land.

Local and tribal governments have been supportive of the Resource Protection Study. Coolidge and Florence city councils each passed resolutions in support of the process, while tribes affiliated with Casa Grande Ruins sent representatives to public meetings in support of the process. Additionally, Arizona Gov. Janet Napolitano has stated in writing that the state supports the sale to the United States of the state's Adamsville property at fair market value. Under the Arizona Constitution state trust lands must be sold to the highest bidder and cannot be donated to the federal government. Consequently, the federal government can only acquire Arizona state trust lands through condemnation. Gov. Napolitano has indicated her support for friendly condemnation.

The expansion of Casa Grande Ruins National Monument.... would protect these fragile and irreplaceable prehistoric fabrics of our Arizona history, which is of tremendous importance to all people.

Gov. Janet Napolitano in a letter to Casa Grande Ruins Supt. Don Spencer, April 14, 2003



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## Chapter 1

**History of the Monument** 

### First Archeological Reservation In The United States

When the Casa Grande Ruins Reservation was established in 1892, it was the first federal archeological reservation created in the United States. Efforts to preserve the Casa Grande Ruins occurred at a time when many individuals

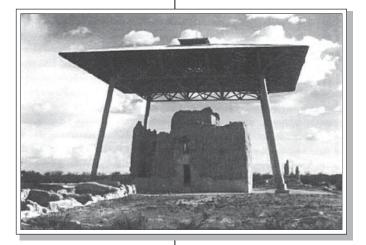
were engaged in attempts to preserve archeological sites across the West, as these sites were increasingly becoming the subjects of vandalism and pot hunting. These preservation efforts eventually culminated in the passage of the Antiquities Act of 1906, legislation which allowed for the creation of National Monuments, a designation eventually conferred on Casa Grande Ruins.

Following passage of the Antiquities Act, many resources with cultural, historical, or natural values were reserved in order to ensure their protection and preservation. Among these many sites, Casa Grande stands as the first cultural site to receive legal protection from the federal government. Information on the movement that cumulated in the creation of the Antiquities Act is provided in Lee (2001). An in-depth treatment of the process by which the Casa Grande Ruins

were preserved is provided in Clemensen (1992:27-64). Information on the establishment of Casa Grande Ruins National Monument provided below is summarized from this work.

The first individual of European descent known to have seen the Casa Grande Ruins is Padre Eusebio Francisco Kino, who visited the site in 1694. At that time he described the structure as a four-story building as large as a castle surrounded by thirteen smaller structures and the ruins of many more. He also noted that he heard of, and in some cases saw, seven or eight more large houses to the east, north and west of Casa Grande (Clemensen 1992:11). The Casa Grande Ruins were visited again by Padre Kino three years later, and by other padres over the next century.

In 1775 a detailed description of the ruins was made by Franciscan Friars Pedro Font and Francisco Garces, two individuals accompanying Lt. Col. Juan Bautista de Anza on his journey leading settlers to establish an outpost near present-day San Francisco, California. At that time the structure was described as just three stories tall, indicating that the top floor had deteriorated completely (Clemensen 1992:15).



Historic photo of canopy constructed in 1932 largely based on a design by Fredrick Law Olmsted, Jr., son of famed landscape architect and park designer, Frederick Law Olmsted Sr. The younger Olmsted also contributed language to the National Park Service's founding legislation, the Organic Act of 1916.

...efforts to protect Casa Grande Ruins can be traced back to approximately 1877... The next major report on the ruins, by Eduard Mulenpfordt in 1844, was not based on first-hand observation, but rather was largely based on the diaries of Font and Garces. Despite this, it brought increased attention to the site. Recorded visits to the Casa Grande Ruins increased in frequency during the mid-nineteenth century, and by the late 1860s and early 1870s Euro-American settlers were farming and ranching along the adjacent Gila River (Clemensen 1992:22). With increased activity in the area and visitation to the site, the removal of artifacts from the ruins became an increasingly common practice.

### Increased Visitation Occurs In The 19th Century; Artifacts Removed

Henry Hanks led the first scientific investigation of the Casa Grand Ruins in 1879. This work resulted in the measurement of the structure and an evaluation of its condition. Rain and natural sand blasts were reported to have taken a toll (Clemensen 1992:24). The remains of other structures in the immediate area were measured and described by Indian Inspector Hammond a few months after the Hanks expedition. In the winter of 1879 the Southern Pacific Railway line through the Casa Grande area was completed, increasing concerns about preservation of the structure. A stage line ran next to the ruins and passengers often got out and explored the grounds. Commonly, people would return to the ruins at a later date to dig for artifacts. Reports of various artifacts being removed from the site were remarked upon in various publications (Clemensen 1992:25).

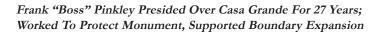
Distinct efforts to preserve the Casa Grande Ruins can be traced back to approximately 1877, when stereoscopic photos and published accounts of the ruins stimulated local preservation initiatives. The territorial government, however, was not forthcoming with money for this pursuit. Further efforts at preservation were stimulated by visits to the area by members of the Hemenway Southwestern Archeological Expedition in 1888. Sylvester Baxter, one of the expedition members who visited the ruins, returned to Boston and persuaded the expedition founder, Mary Hemenway, that the site was in need of preservation. She and other prominent Bostonians began to work towards the preservation of the site through federal channels. After being told an act of Congress would be required to create a reservation, efforts were focused on that legislative body. This work resulted in congressional authorization for the president to reserve the land on which Casa Grande Ruins was located from sale or settlement, and an appropriation of \$2,000.00 toward the preservation of the site (Clemensen 1992:31-33).

#### Local Minister Fights To Preserve Great House

Further efforts to preserve the structure were undertaken by Rev. Isaac T. Whittenmore, who wrote a letter to the Secretary of the Interior detailing the

need to protect the ruin from vandalism and provide for repairs to the structure.

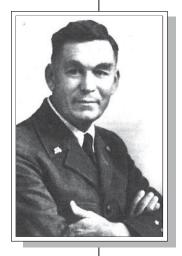
These efforts resulted in the speedy disbursement of the \$2,000.00 already allocated, an inspection of the condition of the ruins, and eventually, work to clean out and repair the Great House. Wittenmore was also authorized to act as the custodian of the building. The repairs had been completed by the time President Benjamin Harrison acted on the congressional authorization provided three years earlier and proclaimed the Casa Grande Ruins Reservation in 1892 (Clemensen 1992:38). Wittenmore remained custodian of the monument until 1899 when he was succeeded by H.B. Mayo. Initially, the duties to be undertaken by the Casa Grande custodian were undefined because no such reservation had previously existed. Eventually the duties came to include visiting the area to prevent vandalism and report damage, and making recommendations for the treatment of the site.



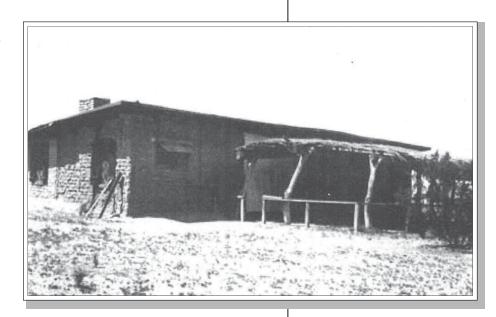
In 1901, Frank Pinkley was made custodian, a position he would hold for 27 of the next 30 years, absent only for a term in the state senate. During his tenure as custodian, Pinkley worked diligently to support the preservation and protection of the ruins. He promoted the construction of a roof over the ruins, lobbied for money to support scientific excavations at the site, suggested that the monument boundaries be expanded to include Adamsville and Escalante ruins, and supported further attempts to prevent the continued deterioration of the structure (Clemensen 1992:47-64). In 1917, jurisdiction over the Casa Grande Ruins was transferred from the General Land Office to the National Park Service, and in 1918 President Woodrow

Wilson converted the reservation to a National Monument (Clemensen 1992:67). These efforts to preserve the Casa Grande Ruins, initially as a Reservation, and eventually as a National Monument, have resulted in the protection of the site for over a century.

At right, Pinkley's home at Casa Grande Ruins. Pinkley oversaw the construction of the first roof over the Great House in 1903



Frank Pinkley





## Chapter 2

The Hohokam Culture

### Hohokam Culture





### Who were the Hohokam?

They were a people who inhabited southern Arizona for over 1100 years.

They were a people who developed a sophisticated canal system to irrigate crops, a system used by the first European settlers.

They were a people who hunted and gathered to supplement their diverse diet of corn, squash and beans with native plants like the fruit of the Saguaro cactus and with wildlife such as cottontails, jack rabbits and antelope.

They were a people who crafted exquisite, whimsical pieces of jewelry using shell, turquoise, and native stone.

They were a people who constructed sunken plazas that archeologists believe were used as ballcourts.

They were a people who preceded the Tohono O'odam and Akimel O'odam Indians who now reside here and regard the Hohokam as their ancestors.

They were a people whose architectural skills enabled them to construct a grand four-story structure the Great House that has endured for 700 years.

They are a people who apparently abandoned their communities, for reasons unknown to archeologists.

They are a people who continue to fascinate, whose architecture and art remind modem Americans that others came before.

Above left, Shell pendant crafted by Hohokam artists and discovered by park service archeologists in the Summer of 2002.

National Park Service Photos

### Hohokam Settlements Include Ballcourts And Canal Networks

Between A.D. 300 and 1450 the Sonoran Desert was settled and farmed by a group known today as the Hohokam. Initially, the extent of the Hohokam culture was defined based on the spread of red-on-buff ceramics (Fish 1989:20). Today, Hohokam settlements are identified by uniquely Hohokam art, architecture, agricultural and ceremonial items or elements such as figurines, censers, and palettes, vessel forms, and platform mounds and ballcourts.



At right, pottery sherds found at site surveyed by park service archeologists. (NPS Photo) Other traits characteristic of Hohokam settlements include:

- extensive canal networks,
- farming techniques that made use of floodwater and runoff,
- villages consisting of dispersed houses and house clusters,
- a regularized formal arrangement of mounds, ballcourts, and plazas,
- cremation as the most common method used to dispose of the dead, and
- widespread trade networks used in the distribution of shell and other exotic goods (Fish 1989: 20-21; Fish et al. 1992:1).

#### Outside Influences on Hohokam Subject of Debate

There is still debate over whether characteristics that define the Hohokam tradition were local developments, or if they were brought into the region by intrusions of people and ideas (Teague 1984:6). Emil Haury, one of the first eminent scholars of the Hohokam, initially believed that the Hohokam culture was an indigenous development, but he later came to believe that the existence of non-local traits indicated that the Hohokam were an immigrant group. Conventional wisdom has now returned to Haury's initial assessment, and it is generally believed that most of the characteristics considered to be "Hohokam" could have developed among indigenous populations that received some input from outside groups (Crown 1991:143-144).

### The Stages of the Hohokam Culture

The Hohokam chronology is not as firmly established as the chronologies for other major prehistoric cultures of the southwest, largely because desert woods are unsuitable for tree-ring dating. Initial assignments of calendar dates to the Hohokam chronology were based on previously dated trade ceramics recovered from Hohokam sites (Crown 1991:139-140). Other techniques that have been used to build the Hohokam chronology include radiocarbon, alpha-recoil, obsidian hydration, archaeomagnetism, thermoluminsecence, seriation, and stratigraphy (Crown 1991:143). Based on these techniques archeologists have identified five time periods that reflect different cultural conditions for the Hohokam people, ranging from AD 300 to AD 1450, after which time archeologists believe the Hohokam people ceased as a distinct culture.



### Artifact scatter at site studied by park service archeologists during Resource Protection

Study (NPS Photo)

The presence of shell and turquoise artifacts and the remains of macaws and parrots at Pioneerperiod sites indicate that these groups were involved in trade networks that extended into Mesoamerica

#### Pioneer Period: AD 300-750

The Pioneer period marked the beginning of pottery-making in southern Arizona. The earliest pottery type was sand-tempered plain brown ware. This was followed by red-slipped ceramics and, by the middle of the Pioneer period, gray and buff ceramics painted with red designs (Cordell 1997:200).

Pioneer villages were small and consisted of several courtyard groups which, in turn, consisted of a few pit houses arranged around a central plaza with associated burial, trash mound, and work areas. Pit house size varies throughout this period, with some of the earliest being small, and others, constructed during the later Pioneer period, being among the largest built by the Hohokam during any time frame.

Throughout the Pioneer period, both dry and floodwater farming techniques were used to raise maize, squash, cotton, and possibly beans. While canals could have been used for irrigation agriculture during the early phases of the Pioneer period, any canals that might have been constructed have been destroyed by subsequent flooding episodes (Crown 1991:145-146). However, canal irrigation did occur sometime during the Pioneer period.

### Irrigation Drives Location of Housing

Concurrent with the advent of irrigation agriculture, habitation sites began to occur in a patterned distribution along rivers, with their spacing possibly determined by the length of canal segments (Crown 1991:147). Ritual objects present at Pioneer period sites include figurines, palettes, and carved stone bowls (Fish 1989:28). The presence of shell and turquoise artifacts and the remains of macaws and parrots at Pioneer-period sites indicate that these groups were involved in trade networks that extended into Mesoamerica.

### Colonial Period: AD 750-950

During the early Colonial period, existing Hohokam settlements increased in size, and new settlements were established both within and outside of the Salt-Gila Basin. Not only were sites established across a wider geographic extent, they were also established in a wider range of environments than during the Pioneer period (Fish 1989:29; Teague 1984:7). Despite the extension in their geographic range,

archaeological investigations of Hohokam sites indicate that site densities, and thus population densities, remained fairly low before the middle of the Colonial period (Teague 1984:7). The size of domestic sites varied greatly during this period, ranging from farmsteads consisting of a few houses to hamlets composed of multiple courtyard groups to large villages. In general, Colonial period houses were smaller than houses constructed during the earlier Pioneer period.

### Ballcourts Constructed During Colonial Period

The first Hohokam ballcourts were constructed during the Colonial period. Villages at which ballcourts were constructed were commonly surrounded by many smaller hamlets, indicating that the village served as a focus of community life (Teague 1984:7). Additionally, the earliest platform mounds, simply trash mounds capped with caliche, became more formalized and began to be placed in a specific position relative to

both ballcourts and plaza areas during the Colonial period. (Fish 1989:30;Crown 1991:147-148). It is thought that these structures served an integrative function, but the exact nature of the activities that occurred at platform mounds is unknown. Because, like ballcourts, they are not present at most Hohokam sites, their existence and proliferation are thought to indicate increasing differentiation in site function. Despite the differentiation in site function, there appear to have been no authoritarian political structures and little social differentiation during the Colonial period (Crown 1991:148).

The extent of farming along tributaries to the Salt and Gila Rivers increased throughout the Colonial period, as did the practice of dry farming, and the variety of plants that were grown and gathered. New cultigens, including tobacco, were added, and field weeds and wild plants such as agave and little barley, were selectively encouraged (Crown 1991: 149). Subsistence throughout this period continued to be based on irrigation agriculture and wild resource procurement.

Craft items, such as shell jewelry, palettes, and figurines, reached their most elaborate forms during the Colonial period. Additionally, the number of exotic items increased in frequency, indicating that the volume of trade between the Hohokam and outlying groups was large, especially late in the period. (Fish 1989:30).

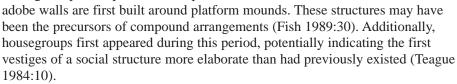


Above and opposite page, Hohokam petroglyphs located on lands studied by park service archeologists for the Resource Protection Study. (NPS Photos)

### Sedentary Period: AD 950-1175

The spread of Hohokam culture occurred extensively during the Sedentary period, which may have been due to people migrating from the core area of Hohokam settlement, or from incorporation of outside territories into Hohokarn communities, but the nature of interactions between people living in the core of Hohokam settlement and those living at the periphery probably varied across the Hohokam system (Fish 1989: 30).

Associated with the expansion of the Hohokam tradition were the construction of platform mounds at a few large villages and a rapid increase in the number of sites that had ballcourts (Teague 1984:10-11). During this period, palisades and post-reinforced



Subsistence during the Sedentary period continued to be based on a system of both irrigation and runoff-dependent agriculture and the exploitation of wild resources. In support of irrigation practices, existing canal systems were extended and new systems were constructed during the Sedentary Period.

### Trade Networks Develop During Sedentary Period

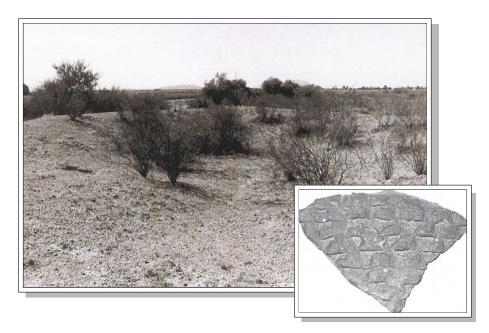
Ritual items, including decorated palettes, stone bowls, and sensors, became more ornate during the Sedentary period. Pottery, elaborate projectile points, and worked shell items are thought to have been produced by part-time specialists (Abbott 1999:5-6; Fish 1989:29-30). In tandem with evidence for specialized production of these items, there is evidence for local and regional exchange networks (Teague 1984:10-11).

Trade networks between the Hohokam and outlying groups during this period were extensive and the volume of materials traded was large (Fish 1989:30). Abbott (1999:7-8) suggests that the ballcourt villages served as marketplaces at which items produced by specialists and trade goods could be exchanged, and that market dates may have coincided with calendrically timed ballgame activities.





Shell ornament discovered on lands studied for the Resource Protection Study; larger image on page 13 (NPS Photo)



Hohokam ballcourt at right; Salado red pottery located during Resource Protection Study (NPS Photos)

### Classic Period: AD 1175-1450

The sociopolitical organization of the Classic period Hohokam is considered one of the most prominent examples of prehistoric southwestern complexity. The Hohokam had extensive canal systems and other forms of intensive agriculture, communities that included multiple sites, a dense and permanent population and massive public architecture at community centers.

For many years, the Classic period was seen as the time when the most drastic changes in the Hohokam occupation in the Salt-Gila Valley occurred, including changes in housing, settlement patterns, interaction spheres, community structures, material culture, and burial patterns. More recently, the Sedentary-Classic transition has come to be seen as less radical because many characteristics of the transition have been identified at pre-Classic sites, and because pre-Classic characteristics extend into the Classic period. While various instigating factors have been suggested as causes of these changes, the exact reasons remain obscure (Crown 1987:148-149).

The Sedentary-Classic transition is marked by the abandonment of many sites, the founding of new sites, and the apparent cessation of Hohokam occupation in outlying areas (Crown 1991:151; Fish 1989:31; Teague 1984:11). In some areas, this might be a function of shifting alliances among Hohokam groups in peripheral areas, but in other places it appears that communities moved back into the central Salt-Gila region. As a result, sites in the Salt-Gila basin increase in number, and populations occur in a more compact area. Whether total population declined or rose during this period is still a matter of debate (Crown 1991:151).

New forms of construction appeared during the Classic period, including houses with walls of freestanding cobbles set in adobe, post-reinforced caliche walls lined with adobe, freestanding coursed caliche structures, and eventually contiguous-walled, coursed adobe pueblos. In general, these structures are larger than Colonial or Sedentary period structures (Crown 1991:15 1; Fish 1989:33). Although architectural changes have sometimes been thought to reflect migration of outside groups, continuity in ceramics and architecture indicate that these changes developed indigenously (Fish 1989:33).

At the beginning of the Classic period, the public architecture at many sites was rebuilt and relocated and walls were built around the new structures, creating compound features (Fish 1989:34). The changes in public architecture are thought to reflect changes in sociopolitical organization, and suggest that during the Classic period, hierarchical relationships developed within and between communities. Both ballcourts and platform mounds tend to be found at Classic period sites. Construction of ballcourts and platform mounds seems to have been replaced in the later part of the Classic period when Great Houses, such as the Casa Grande, were first erected (Crown 1991:151-152).

#### Other Great Houses Built; Only Casa Grande Stands Today

Although only Casa Grande stands today, two other such structures have been identified archeologically (Wilcox 1991:268), and Padre Kino reported on having heard of or seen seven or eight more in 1664 (Clemensen 1992:11). Like Casa Grande, these Great Houses were large, multistoried adobe buildings constructed on mound bases that were proportionally smaller than earlier platform mounds (Fish 1989:33-34). Although new platform mounds were not built during the later portion of the Classic period, adobe structures used for habitation were built on top of previously existing mounds and adobe compounds were constructed around them (Crown 1991:151-152; Fish 1989:32).

Regional trade decreased during the Classic period, and trade of ceramics was largely limited to exchanges along canal systems (Abbott 1999:11; Teague 1984:11). Some items, such as shell, Salado polychromes, lithic raw materials, and copper bells, continued to be exchanged along trade networks that existed both within the Phoenix basin and into peripheral areas (Fish 1989:33). Many ritual-use artifacts, such as censers, stone bowls, and palettes, ceased to be produced during this period (Fish 1989:31).

### Hohokam Population Plummets In Post-Classic Period

The end of the Classic period marked the end of the Hohokam tradition as a distinct culture. When the Spanish entered the region in the seventeenth century, the canal systems and public architecture produced by the Hohokam were not in use, and population densities and distribution did not match those that existed when the Hohokam flourished (Fish 1989:34).



Casa Grande Ruins ranger Dawn Daw holds sherds located on lands studied in the Resource Protection Study (NPS Photo)



Many of the important Hohokam sites once present along the Salt River have been destroyed by development



**NPS Photos** 

### The Hohokam and The Land

The Hohokam tradition developed in the Sonoran Desert and the spread of Hohokam settlements largely coincides with the boundaries of this distinctive environment. The Sonoran Desert is within the Basin-and-Range Province: topography consists of parallel northeast-southwest trending basins that are bordered by low, discontinuous mountain ranges (Fish and Nabhan 1991:31). The desert basins and mountain ranges characteristic of the Sonoran Desert region result in a wide range of elevations over relatively short distances. These differences in elevation provide for a gradient of habitats between the flood plains and the mountains. Many of the wide variety of plants present throughout the Sonoran Desert are edible, seasonally predictable, easily harvested, abundant, and readily processed and stored. Because of these characteristics, wild food resources play a large role in supporting populations in this region (Fish 1989:21-22).

The vegetation that most distinguishes the Sonoran Desert from other Southwestern deserts are the giant saguaro cacti and the small xerophytic trees that dominate the landscape (Fish 1989:21). In the immediate Casa Grande area, it is likely that a desert saltbrush community dominated the prehistoric landscape. Creosotebush, mesquite trees, and riparian vegetation were probably also present along the Gila River (Craig 2001:8). Animal species that are associated with the environment surrounding Casa Grande include coyote, kit fox, mule deer, desert cottontail, antelope jackrabbit, black-tailed jackrabbit, and various squirrels, rats, mice, desert tortoise, western diamondback rattlesnake, Mojave rattlesnake, Colorado River toad, Gila monster, horned lizard, and other lizards.

Although many of the native fish species are no longer present in the Gila, during prehistoric times, Colorado squawfish, bonytail chub, Gila coarse-scaled sucker, and razorback sucker were all once present (Craig 2001:8).



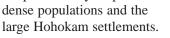
Rainfall in the region occurs primarily during the winter and the summer months. Localized,

high-intensity thunder showers occur during July and August. During the winter, gentle widespread showers between occur December and March. Rain rarely falls in late spring or early fall (Craig 2001:8). High summer temperatures and mild winters are standard in this region.

The area's lack of precipitation increased reliance on irrigation agriculture. Hohokam farmers used perennial rivers supplied by high-elevation watersheds outside of the desert to support large-scale riverine irrigation systems, while intermittent streams and washes supported more limited irrigation and floodwater cultivation (Fish and Nabhan 1991:32).

#### Rivers Sustained Hohokam Communities

Although the Hohokam inhabited lands which extend to the edges of the Sonoran Desert, their core settlement area, the Salt-Gila Basin, was centered southwest of the present-day city of Phoenix upstream from the confluence of the Salt and Gila Rivers. These rivers were the basis for agriculture in the core area (Fish et al. 1992:3). Because these rivers are not dependent on rainfall in the basin, and frost danger is not significant during the mild winters, it is possible to harvest two crops a year in this area. This productivity helped sustain





Historically, a majority of the archeological investigations into the Hohokam have occurred in the Salt-Gila Basin, largely due to the rapid expansion of the city of Phoenix. Many of the important Hohokam sites once present along the Salt River have been destroyed through development. The destruction of Salt River sites increases

the importance of preserving sites along the Gila River, which have yet to be as impacted by development.



At left, native vegetation at Hohokam site studied in Resource Protection Study; above Sonoran Desert wildlife (NPS Photos)

### Hohokam Farmers Used Dry Farming And Irrigation

As is characteristic of the Hohokam system, both irrigation agriculture and dry farming were practiced in the Casa Grande area. Practicing both

irrigation agriculture and dry farming was a form of insurance against crop failure. For this reason, control over an area that included floodplain, terrace, and bajada environments had to be maintained (Crown 1987:158).

Two Hohokam irrigation systems are present, one on either side of the Gila River. Both of the canals head at bends in the river and run along the floodplain directly below the lower river terraces. This positioning allowed for the optimal irrigation of the floodplains, but prevented the irrigation of the terraces, which were worked using dry farming techniques. Only the remains of the main canals have been documented, but it is likely that distribution canals drew water off of the main canals,

and lateral canals took water to individual plots (Crown 1987:150). The actual amount of land irrigated at any one time was probably considerably less than the total area that could have been watered using the two canals (Crown 1987:15 1). Habitation and agricultural sites are found close to the canals, and

agricultural sites and fieldhouses extend up on to the adjacent terraces and bajadas (Crown 1987:147, 150-151).

The dry farming features that are present on the terraces and bajadas adjacent to the floodplain include rock piles, rock alignments, rock terraces, check dams, and catchment basins (Crown 1987:15 1). Rock piles are the most common dry farming features and occur on terraces in areas of less than one

percent slope in groups ranging upwards of one hundred. Evidence indicates that plants were grown in and between the piles.

Roasting pits are often found in association with the rock piles, indicating that the plants grown here, commonly agave, were also processed in the area. The rock alignment, or bordered garden, features occur on upper terraces in areas with up to a two percent slope. All of these features are dated based on artifacts associated with them and their proximity to habitation sites for which dates have been obtained (Crown 1987:150).



Hohokam used dry farming and irrigation to help avoid crop failure. At right, a rock pile site demonstrates Hohokam dry farming techniques; Above, irrigation canal near Casa Grande Ruins (NPS Photos) *Plantago*, agave, and ground cherry. Weeds that may have been used include *Chenopodium, Trianthema*, globe mallow, and *Boerhaavia*. It seems that agave was grown exclusively in dry farmed areas; other crops were farmed using both irrigation and dry farming techniques (Crown 1987:151-152).

### Hohokam Settlements Reflected Dependence On Irrigation

Hohokam settlements reflected three different housing patterns: villages, hamlets, and field houses. During the Classic period along the Canal Casa

Grande, village sites such as Casa Grande Ruins, have platform mounds. Other village sites along the Canal Casa Grande include Pueblo Pinal, Florence Pueblo, Adamsville, and Pueblo Bisnaga.

### Platform Mounds Found At Villages Like Casa Grande Ruins

Interestingly, the platform mounds located within the villages were spaced at fairly regular intervals along the canal of between 4.8 and 5.8 kilometers. This spacing is characteristic of

Classic-period village sites on irrigation systems throughout the Hohokam area.

Not surprisingly, all of these village sites, as well as many of the smaller hamlets, are within one kilometer of the canal system (Crown 1987:153-154). Each village site was most likely responsible for managing the adjacent section of the canal, and the different villages probably coordinated for large-scale tasks including construction, defense, canal repair, and major conflict resolution. The largest site at the end of the canal (Casa Grande) most likely had some hierarchical dominance over the other, smaller, sites along the canal (Crown 1987:158).

Hamlets are those housing sites that lacked platform mounds or other ceremonial architecture. Fifteen of these sites have been located to date. Some consist only of a few pit house structures, but others have adobe-walled compounds. All of these sites are interpreted as having been occupied year-round, but they probably were not occupied throughout the Classic period, or all at the same time (Crown 1987:152). These hamlets occurred closer together than the 5 km spacing characteristic of the village sites. Most hamlets are adjacent to dry-farmed agricultural plots (Crown 1987:155).

The third type of habitation site in the Casa Grande area is the field house. These were occupied for only a portion of the year at which time the occupants would have been engaged in floodwater farming activities. Only two fieldhouses have been located in this area; both were fairly unsubstantial structures (Crown 1987:152-153).



Above, roasting pit located at site surveyed for Resource Protection Study; NPS Archeologist Trinkle Jones holds a metate, or grinding stone located at dry farming site

Roasting pits are often found in association with the rock piles, indicating that the plants grown here, commonly agave, were also processed in the area. In order to understand the

function and significance

preserved and understood.

of the Great House,

functioned must be

aspects of the entire system within which it

The final housing type, fieldhouses, have also been found in the Casa Grande area. Farmers using floodwater agriculture lived in field houses for only part of the year, when floodwater agriculture was possible. Only two field houses have been documented in the Casa Grande area.

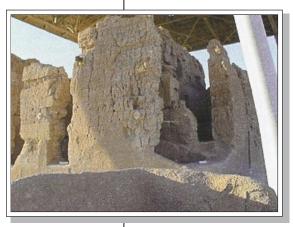
### Cooperation Critical To Irrigation Agriculture

All of the habitation sites along the Canal Casa Grande, from its headgates to its terminus, form a prehistoric irrigation community (Crown 1987:155). Because numerous habitation centers depended on the proper function of a single canal, as is the case along the Canal Casa Grande, some form of cooperation among these villages must have existed. The



location of the largest sites at the end of the canal systems suggests the existence of an overarching system of cooperation within an irrigation community, ensuring that even the settlements farthest down the system received their share of irrigation water (Crown 1987:156). Although there was necessarily considerable cooperation within individual irrigation communities along the Gila River, there was not necessarily significant cooperation between individual irrigation communities (Crown 1987:158).

When the Great House at Casa Grande Ruins is seen not only as a single immense and impressive structure, but also as a component of a larger system that existed along the Canal Casa Grande, the need to preserve the other components of that system becomes clear. In order to understand the function and significance of the Great House, aspects of the entire system within which it functioned must be preserved and understood.



Above right, collapsing mound reveals ancient rooms at site surveyed during Resource Protection Study. At left, Casa Grande Ruins (NPS Photos)



# Chapter 3

**Boundary Expansion** 

### Casa Grande Ruins Among America's Premiere Cultural Sites

Casa Grande Ruins National Monument was one of the first national monuments in the national park system, placed into the system as a reservation in 1917 and declared a national monument by President Woodrow Wilson in 1918.



It is fitting that a world-renown resource like Casa Grande Ruins be included within the national park system, which includes so many of America's cultural and natural treasures: majestic places like Grand Canyon, Yellowstone or Yosemite; pivotal historical sites like Gettysburg, Fort Sumter or Valley Forge; and irreplaceable ancient cultural sites like Mesa Verde, Chaco Culture, and Canyon de Chelly.

Americans don't always know that the National Park Service is the agency that operates all of these amazing places. Oftentimes, the general public confuses the National Park Service with the U.S. Forest Service, an agency of the Agriculture Department responsible for managing America's national forests for recreation and timber production.

Many Americans also may not realize the considerable size of the national park system: 388 units throughout the United States; Arizona alone boasts 20 units of the system, including Grand Canyon and Saguaro national parks, and Walnut Canyon and Tonto National Monuments, both of which, like Casa Grande, preserve ancient cultures.

### **History of the National Park Service**

The origins of the National Park Service can be traced to an act of Congress, dated March 1, 1872, which established Yellowstone National Park in the Territories of Montana and Wyoming "as a public park or pleasuring ground for the benefit and enjoyment of the people" and placed the park "under exclusive control of the Secretary of the Interior."

In the years following the establishment of Yellowstone, the United States authorized additional national parks and monuments, most of them carved from the federal lands of the West. These also were administered by the Department of the Interior, while other monuments and natural and historical areas were administered as separate units by the War Department and the Forest Service of the Department of Agriculture. No single agency provided unified management of the varied federal parklands.



**NPS Photos** 



That changed on August 25, 1916, when President Woodrow Wilson signed the act creating the National Park Service, a new federal bureau in the Department of the Interior responsible for protecting the 40 national parks and monuments then in existence and those yet to be established.

This "Organic Act" of August 25, 1916, states that "the Service thus established shall promote and regulate the use of Federal areas known as national parks, monuments and reservations ... by such means and measures as conform to the fundamental purpose of the said parks, monuments and reservations, which purpose is to conserve the scenery and the natural and

historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

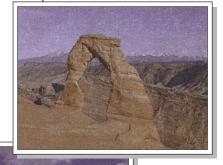
An Executive Order in 1933 transferred 63 national monuments and military sites from the Forest Service and the War Department to the National Park Service. This action was a major step in the development of today's truly national system of parks-a system that includes areas of historical and prehistorical significance, as well as areas of scenic and scientific importance.

### The National Park Service Mission

The National Park Service still strives to meet those original goals, while fulfilling many other roles as well: guardian of our diverse cultural and recreational resources; environmental advocate; world leader in the parks and preservation community; and pioneer in the drive to protect America's open space. These responsibilities are reflected in the National Park Service mission statement which provides a guiding vision for park service actions:

The National Park Service preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

Photos: Top left, Redwood National Park, California; Below, Arches National Park, Utah; Grand Teton National Park, Wyoming; Washington Monument; Washington, DC (NPS Photos)







#### Statement of Purpose

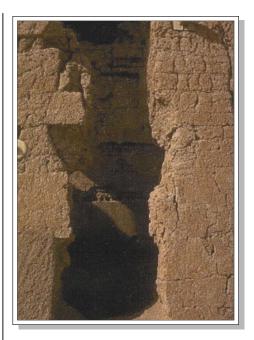
Casa Grande Ruins
National Monument protects
the four story Casa Grande,
the most distinctive
example of architecture
built by the ancient people
the O'odham people call the
"Hohokam," meaning those
who have gone.

The monument provides scientific and public understanding of the natural, cultural, pre-historic, historic and archeological resources.

The monument is a clearinghouse for Hohokam research, education and interpretation.

### Statement Of Significance

Casa Grande Ruins was the first archeological site to be preserved (1892) and is the fifth oldest unit in the National Park Service. The Casa Grande is the only prehistoric structure of its kind and the only unit within the National Park Service preserving and interpreting the Hohokam culture's Classic period. The Hohokam were the first irrigation farmers of what is now the United States. The ancient people mastered the desert before the first Europeans crossed the Atlantic.



### **NPS Photo**

### Purpose And Significance Of Casa Grande Ruins

Similar to the National Park Service mission statement, parks develop statements of purpose and significance to help guide park management decisions and to serve as a reminder of why these special places were established and placed in the national park system.

Casa Grande Ruins' statement of significance underscores the park's unique role in the nationwide park system: it is the only unit in the national park system that preserves and interprets the Hohokam culture for public education and enjoyment. The park's statement of purpose underscores the importance of

preserving the Ruins, but also cites the role of the park in educating the public about the Hohokam culture. Protecting the Ruins, and fulfilling the park's purpose, require attention not only to the Ruins themselves, but to preserving the context in which the Ruins are experienced by visitors. Consequently, the National Park Service must be concerned about whether visitors to Casa Grande Ruins might someday look out from the Great House at rows of modern buildings and lose the sense of place that helps individuals step back in time, and experience the Ruins in a setting similar to its prehistoric timeframe. For these reasons, preserving clean air, clean water, and the natural quiet are also important for the long-term health of the park.

### **Boundary Expansion And Park Purpose**

The National Park Service has developed criteria that help the agency determine when boundaries of parks ought to change. Those criteria call for the National Park Service to consider adding into parks resources that are significant and related to the park's purpose and significance. Because Casa Grande Ruins' purpose is to preserve the Ruins and to educate the public about Hohokam culture, the park service has focused the boundary study process on protecting the Ruins themselves and considering adding sites that would enhance the public's understanding of the Hohokam culture. As a result, the boundary study process was focused on determining whether there were any potential negative impacts to the Ruins that might need to be addressed with boundary changes and on identifying what sites would enhance the public understanding of the Hohokam culture.

### NPS Guidelines On Park Expansion Applied At Casa Grande Ruins

Because the national park system contains America's most important cultural and natural sites, places like Gettysburg Battlefield, Great Smoky Mountains or the Statue of Liberty, additions to the system must also be of a high caliber. For this reason, the park service has drawn up requirements that apply to expansions of existing sites such as Casa Grande Ruins. NPS guidelines state that lands to be



At left, housing compound at Adamsville (NPS Photo)

included in the boundaries of any unit of the national park system must:

- 1. Include **significant resources** or opportunities related to the purpose of the park; **OR**
- 2. Address **operational and management issues** such as access and boundary identification by topographic or other natural features or roads; **OR**
- 3. **Protect park resources** critical to fulfilling the park's purposes AND
- 4. The lands must be **feasible to administer** considering their size, configuration, ownership costs and other factors; AND
- 5. Other alternatives for management and resource protection are not adequate.

### Park Service Launches Resource Protection Study For Casa Grande Ruins; Seeks Public Involvement

In March 2001, the National Park Service announced that it would conduct a Resource Protection Study to examine whether the boundaries of Casa Grande Ruins ought to be changed. The decision to conduct a study was driven in part by the desire expressed by the Archeological Conservancy to potentially sell its holdings to the National Park Service, and by the possibility of development along the Ruins' west boundary.

Casa Grande Ruins staff held meetings in March 2001, June 2001, August 2001 and April 2002 to discuss the Resource Protection Study with the public. The purpose of the meetings was to get feedback about whether the monument ought to be expanded and if so, what properties ought to be included. But, the meetings also were about trying to identify people's long-term goals and vision for the Coolidge-Florence community.

National Heritage Areas comprise landscapes in which residents, businesses, and local governments join together to help conserve special places and celebrate their heritage.

Congress has established 23 National Heritage Areas around the country in which conservation, interpretation and other programs are managed by partnerships among federal, state, and local governments and the private sector.

A "management entity" is named by Congress to coordinate the partners' voluntary actions. This management entity might be a local governmental agency, nonprofit organization, or an independent federal commission.

The National Park Service, in partnership with the management organization, provides technical assistance and financial assistance following designation.

These meetings drew representatives from the cities of Coolidge and Florence; Pinal County; the Tohono O'odham Nation, the Gila River, Ak-Chin, and Salt River Pima-Maricopa Indian Communities; as well as representatives from the Arizona State Historic Preservation Office, the Arizona State Museum, the Archeological Conservancy, the National Parks Conservation Association, the Arizona State Lands Department, and members of the general public. The bulk of the comments received reflected community support for protecting Casa Grande Ruins and other important sites, improved interpretation and educational programs, partnership efforts within the community, and the importance of maintaining the area's economic viability. The comments assisted park service staff in determining the level of community interest in expansion of the monument and in determining the extent of the study area. (A listing of the comments is contained in the appendices.)

### Park Service Gets Feedback On Potential Alternatives for Study; Heritage Area Idea Emerges

At an April 2002 meeting, park service staff shared with the public possible scenarios or alternatives for further study, which included the possibility of a congressionally-authorized National Heritage Area that would encompass the archeologically significant sites and other cultural sites in the Coolidge - Florence vicinity. The Heritage Area concept grew out of an interest expressed at the meetings by archeologists, local citizens and representatives from tribal and local governments that the area's rich cultural resources should receive consideration as the communities grow, and that a National Heritage Area may be a way of providing a coordinated approach to protecting sensitive sites while also encouraging more and longer tourist visits to the area.

Nationwide, 23 National Heritage Areas have been designated by Congress to showcase the rich cultural resources of particular geographic areas. A more recently-designated National Heritage Area, Yuma Crossing in Yuma, Arizona, highlights the natural crossing on the Colorado River that has been a gathering spot for people for over 500 years. It was an important 19th-century landmark during the westward expansion of the United States.

Other heritage areas include the Erie Canalway National Corridor and the Hudson Valley National Heritage Area, which highlight natural and cultural resources related to the Erie Canal and the Hudson River. Heritage Areas with themes centered on a region's industrial development are also part of the system, such as the MotorCities-Automobile National Heritage Area which highlights the development of the U.S. auto industry and the Rivers of Steel National Heritage Area in Pennsylvania thematically connects sites related to the steel industry.

In addition to the Heritage Area concept, the alternatives discussed at the April 2002 meeting included acquisition of properties adjacent to Casa Grande Ruins or in the immediate vicinity, as well as properties that contained significant resources that were not in the immediate area of Casa Grande Ruins. Below is a listing of potential alternatives discussed at that meeting:

- 1. No Action No changes to Casa Grande Ruins boundaries.
- Acquire from willing sellers or donors property to the west of Casa Grande Ruins' boundary and property at the north boundary. Park Service staff developed this alternative because research suggested that a high concentration of archeological resources, such as pot sherds, submerged walls, or ballcourts, jewelry, or other features, might be located there.
- 3. Acquire from willing sellers or donors property to the west and north of Casa Grande Ruins' boundary and study for acquisition and/or preservation by other means the so-called Grewe site (located near the Coolidge Wal-Mart), the Vah Ki Inn site, which is located on Casa Grande Ruins' south boundary and Sacaton Village, adjacent to Casa Grande Ruins east boundary near the Blockbuster in Coolidge.
- 4. Acquire from willing sellers or donors the Grewe, Vah Ki Inn and Sacaton Village sites and acquire or preserve sites on state trust land that are located along the 20-mile prehistoric canal that were occupied during the same time as Casa Grande Ruins.
- 5. Acquire from willing sellers or donors property to the west of Casa Grande Ruins' boundary and property at the north boundary and study the potential protection of other significant sites under a Heritage Area.
- 6. Acquire from willing sellers or donors property to the west and north of Casa Grande Ruins' boundary and study for acquisition and/or preservation by other means, the Grewe site, the Vah Ki Inn site, and Sacaton Village.

### Focus Of Study Narrowed; Some Properties Excluded From Consideration

The alternatives for possible further study offered in April reflected a desire by the park service to review as many sites as possible that might be related to Casa Grande Ruins and were developed before the park service had completed a review of available archeological information or potentially-related archeological sites. Subsequently, park service archeologists narrowed the focus of their study and excluded:

- sites that have already been developed.
- sites that have already been destroyed by agriculture.



Turquoise mosaics found at monument in 1920s reveal Hohokam artistry (NPS Photo)

- sites that park service archeologists were unable to obtain permission to visit, either because access was denied, or no response was received from affected landowners.
- sites with a low probability of significance.

In particular, the following properties were excluded from consideration:

- property located near Casa Grande Ruins' north boundary that is owned by a private party who is not interested in selling;
- the Vah Ki Inn site located near Casa Grande Ruins' south boundary because it has already been developed.
- the Sacaton Village site which is located across from Casa Grande Ruins in the commercial development that includes a Taco Bell/KFC restaurant and a Blockbuster video store because portions of the site have been destroyed by development and because property owners have no interest in selling.

Park service staff also decided against including a National Heritage Area within the alternatives to be considered for boundary expansion because the designation of a National Heritage Area by Congress would not affect whether Casa Grande Ruins would be expanded.

### **Park Service Identifies Important Properties**

As the resource protection study process unfolded, specific sites emerged as especially important for consideration because of their relationship to Casa Grande Ruins and their potential for acquisition on a willing seller basis. Below is a summary of those sites.

### Properties Adjacent to Casa Grande Ruins NM

At the outset of the Resource Protection Study, the park service has been interested in lands that were adjacent to Casa Grande Ruins. When Casa Grande Ruins was established, the boundaries did not include the entire village; some important pieces were left out. For these reasons, park service staff decided to pay particular attention to those properties adjacent to the Ruins.

Properties adjacent to Casa Grande Ruins that are analyzed for possible inclusion in the Ruins' boundaries include:

- Agricultural land (160 acres) under cultivation on Casa Grande Ruins' western boundary. This property is of interest because it contains artifacts related to the Great House and the community surrounding it and because the land lies within the "viewshed" of the Great House, meaning that visitors to the Great House can look out and see an undeveloped landscape that is similar to what the inhabitants of the Great House might have seen. This property has previously been suggested as a site for a correctional facility and other development projects. (This study will refer to these lands hereafter as the West Boundary lands)
- A small parcel of land (4.5 acres) now controlled by the Bureau of Land Management that is located on Casa Grande Ruins' south boundary. The land lies outside the current Ruins' southwest boundary inside the Pima Lateral Canal; the park service would obtain this land from BLM while also transferring to the Bureau of Indian Affairs 3.75 acres within the Ruins' boundary to enable the San Carlos Irrigation Project to widen the Pima Lateral Canal. (Known hereafter as the BLM parcel)
- A small parcel of land (7.4 acres) now controlled by the Bureau of Indian Affairs near Casa Grande Ruins that constitutes the Horvath site, where prehistoric ceramics and skeletal material have been located. Investigation of the site by Northland Research Inc. in 1996 indicated that the site contained 81 cultural features, including adobe walls, canals, pit houses, borrow and roasting pits, human burials and cremations. (Known hereafter as the Horvath Site)

Properties near Casa Grande Ruins that Comprise the Grewe Site

Properties now owned by the Archeological Conservancy that were donated to the Conservancy by Wal-Mart (13 acres) and the Cole (28.52 acres) and Faul (2 acres) families. The properties donated make up part of the Grewe site, which is listed on the National Register of Historic Places. The Grewe site was not inhabited during the same time period as Casa Grande Ruins, but Casa Grande was developed as settlement moved west from Grewe toward the Ruins. The two sites are estimated to cover approximately 2 square miles, half of which is preserved within the current boundaries of Casa Grande Ruins. Excavations carried out by Northland Research between 1995 and 1997 revealed a large residential district at Grewe where hundreds of houses were located. (Known hereafter as the Grewe site)



Above, Horvath site proposed for transfer from BIA to National Park Service (NPS Photo)



Above left, portion of the Grewe site; Below, archeological site studied in Resource Protection Study (NPS Photos) Properties not in the immediate vicinity of Casa Grande Ruins, but related to the Ruins, that were studied by the National Park Service

- State trust lands and private lands that contain the Adamsville Ruin site, a large housing complex located at the intersection of High-way 287 and Adamsville Road. The site is named after the 19th cen-tury town located about 1/2 mile north of the site. It is the second largest Hohokam housing area along the Canal Casa Grande, second only to the combined communities of Grewe and Casa Grande. The entire site is approximately 155 acres; 80 percent of which is owned by the state. (Known hereafter as the Adamsville site).
- Prehistoric agricultural sites located on state trust lands that contain dry farming sites that were important to meeting the dietary needs of area residents and do not exist at Casa Grande Ruins. Some of these sites are located on state trust lands; others are privately owned. (Known hereafter as the dry farming sites).

### Park Service Selects Alternatives For Study; Environmental Analysis Required

Whenever the park service proposes an action, like a boundary change, that may affect the "human" environment, it is required under the National Environmental Policy Act to study the potential impacts to plants, animals, air, water, and other aspects of the natural world, but also impacts on the economies and quality of life of local communities.

Actions that have a significant impact on the human environment require the park service and other government agencies to complete an Environmental Impact Statement, which is an in-depth, thorough study that can take years to complete.

When agencies do not expect a proposed action to have a significant impact, as in the case of boundary expansion at Casa Grande Ruins, they conduct an Environmental Assessment.

The Environmental Assessment will indicate whether the proposed action will have a significant impact on the environment, and would therefore require an Environmental Impact Statement, or whether the impact is not significant. In that case, agencies issue a "Finding of No Significant Impact."



In conducting either the Environmental Assessment or Environmental Impact Statement, the impacts to the human environment are studied by examining different alternatives for action. Because the park service conducted an Environmental Assessment in conjunction with the Resource Protection Study, park service staff decided to consider different alternatives for changing the boundary at Casa Grande Ruins, including a "no action" alternative.

### **Alternatives Receiving Analysis For Boundary Expansion**

After completing the archeological work and determining which specific properties and sites might be candidates for boundary expansion, NPS staff grouped properties together to analyze how the various combinations of properties fit within the boundary adjustment criteria. Below is a listing of alternatives:

#### Alternative 1 - No action

Total acquisition= 8.16 acres of federal land.

Typically, a no action alternative means that the status quo will remain. For the purposes of this study, however, we are including in the "no action" alternative three federal land transfers between federal agencies that will occur regardless of any congressionally authorized boundary expansion. Those transfers involve: a. 3.75 acres from Casa Grande Ruins to the Bureau of Indian Affairs to accommodate widening of the Pima-Lateral canal; and b. 4.5 acres from BLM to Casa Grande Ruins to restore lands removed from Casa Grande Ruins' southwest boundary in 1926; and c. 7.4 acres that constitute part of the Horvath site from BIA to Casa Grande Ruins.

### Alternative 2 - Contiguous property plus federal lands transfers Total acquisition=88.16 acres of federal and private land.

Acquire on a willing seller basis 80 acres (of the 160 acre parcel) on Casa Grande Ruins' west boundary in addition to completing the federal land transfers described in the no action alternative. Park service staff determined that acquisition of the full 160 acres was not necessary, that acquiring half of that property (80 acres) would be sufficient to obtain significant resources and protect the park's viewshed.

## $\label{lem:contiguous} \textbf{Alternative 3-Contiguous property, plus federal lands transfers, plus portions of Grewe}$

Total acquisition=131.68 acres of federal and private land.

Complete the federal land transfers, acquire 80 acres on Casa Grande Ruins' west boundary and acquire from the Archeological Conservancy 43.52 acres that include the Cole, Faul and Wal-Mart properties which constitute portions

### Criteria For Changing Park Boundaries

- 1. Include significant resources or opportunities related to the purpose of the park;
- 2. Address operational and management issues such as access and boundary identification by topographic or other natural features or roads;
- 3. Protect park resources critical to fulfilling the park's purposes;

#### **AND**

4. The lands must be feasible to administer considering their size, configuration, ownership costs and other factors:

#### AND

5. Other alternatives for management and resource protection are not adequate.

### Casa Grande Ruins National Monument



Above, a portion of the Grewe Site owned by Archeological Conservancy; The Grewe Site contains hundreds of Hohokam houses that are older than Casa Grande. The significance of the resources at the Grewe site prompted the Archeological Conservancy to acquire the lands, including a 13-acre

### Alternative 4 - Contiguous property plus federal land transfers, plus Grewe and Adamsville sites

Total acquisition=257.68 acres of federal, state and private land.

Acquire on a willing seller basis 80 acres on Casa Grande Ruins' west boundary, complete the federal transfers, acquire from the Archeological Conservancy the Cole, Faul and Wal-Mart properties; acquire from the state 126 acres of the Adamsville site.

### How The Alternatives For Boundary Adjustment Measure Up Against Boundary Expansion Criteria

#### Alternative 1 - No Action

The No Action alternative, which calls for federal transfers of land with a net increase of monument acreage by 8.18 acres meets two of the criteria for boundary adjustment: Criterion #1) acquiring significant resources related to park purposes and #2) resolving an operational problem.

**Acquiring Significant Resources:** NPS acquisition of the Horvath site gives NPS the opportunity to acquire a parcel that includes significant artifacts from the Classic period, including roasting pits, human burials and cremations, adobe walls, pit houses and canals.

**Resolving an operational problem:** The federal land transfers are consistent with this boundary expansion criterion because the transfer of the BLM property to the NPS would resolve an operational problem, namely the lack of NPS control over a patch of land that was removed from NPS boundaries in 1926. Over the years, the parcel has been used as a storage lot for spare parts and other equipment, uses not consistent with park purposes or needs. Similarly, shifting the Casa Grande boundary by slicing 3.75 acres off the monument boundary along the Pima Lateral canal facilitates BIA management of the canal.

Other Alternatives for Management: BLM has managed the 4.5 acres at Casa Grande Ruins' southwest corner as a vacant storage lot; indeed the land has no other purpose for BLM. NPS, on the other hand, can manage the property consistent with the management of Casa Grande Ruins' other lands, i.e., in a manner that is protective of the resources by monitoring noxious species, controlling vandalism or looting, seeking to return to the land to its natural condition, and otherwise managing the land consistent with ensuring a high quality visitor experience. Similarly, BIA's management of the Horvath site is not oriented toward visitor use or enjoyment.

By contrast, NPS could readily expand its interpretive programs, wayside exhibits and other visitor services to encompass the important resources of the Horvath site.

# Alternative 2 - Federal land transfers plus acquisition of contiguous property on Casa Grande's western border

Acquiring the contiguous property on Casa Grande's western border meets two boundary adjustment criteria: Criteria #1) acquiring significant resources and #3) protecting park resources In particular, NPS has been concerned about the potential development of property on Casa Grande's western border which has been used as a cotton field but has been the subject of development proposals in recent years. This alternative calls for the acquisition of 80 acres.

Acquiring Significant Resource: The 80 acres at Casa Grande Ruins western boundary contains concentrations of artifacts related to the Casa Grande community which constructed the Great House.

**Protecting park resources:** Development of the property could have a significant effect on the quality of the visitor experience at Casa Grande Ruins. The view from the Great House includes the

agricultural lands and therefore gives visitors the opportunity to experience the Great House in a setting somewhat similar to prehistoric conditions. Development of that property could mean that visitors to the Great House might look out at rows of homes, stores, a correctional facility, or an industrial complex. Development of that property may also produce noise and light pollution and possibly air and water pollution. For these reasons, acquisition of the property on Casa Grande's western border may be necessary to preserve park resources. NPS staff have determined that acquisition of 80 acres at the park's boundary would minimize the impacts to the park from development.

Other alternatives for management: Because the property is privately-owned, there is a strong likelihood that the property will be developed, potentially with uses that are incompatible with Casa Grande Ruins and in a manner that would preclude the opportunity for members of the public to enjoy the resources that are an extension of the Casa Grande community which constructed the Great House.

Administrative feasibility: The close proximity of the property to Casa Grande Ruins will facilitate administration of the additional property. Expanding interpretive opportunities to encompass the additional land would be feasible with monument staff and/or volunteers.



Mounds conceal prehistoric rooms at site studied by NPS archeologists (NPS Photo)

#### Alternative 3 - Federal land transfers, contiguous property, plus Grewe site

Acquiring the Grewe site, in addition to the federal land transfers and the contiguous property, would fulfill boundary adjustment criterion #1) **acquiring significant resources** related to the purposes of the park. Acquiring lands that make up part of the Grewe site from the Archeological Conservancy would



provide an opportunity for Casa Grande Ruins visitors to understand the full extent of the Hohokam settlement in the immediate vicinity of Casa Grande Ruins and how settlement at Grewe led to settlement at Casa Grande and construction of the Great House.

Acquiring significant resources: Archeological studies indicate that the Grewe site encompasses hundreds of houses as well as ballcourts and earthen ovens (hornos). This rich resource could be shared with visitors through interpretive talks, wayside exhibits and other visitor services provided by Casa Grande Ruins.

*Other alternatives for management:* Ownership by the Archeological Conservancy ensures that the sites will be

protected from development but does not facilitate public enjoyment of, or education about, those sites. Inclusion of those sites within Casa Grande Ruins would heighten public awareness of the sites and ensure that they are managed for the benefit of current and future generations.

Administrative feasibility: Expanding interpretive opportunities to encompass the additional land would be feasible with monument staff and/or volunteers. Although the lands to be acquired are not contiguous with Casa Grande Ruins, or contiguous with each other, their close proximity to Casa Grande Ruins will facilitate administration of those sites. Other units of the national park system also include properties that are not contiguous with the main land base of a park, such as Jean LaFitte National Historical Park and Preserve, which consists of six physically separate areas that preserve significant examples of the natural and cultural resources of Louisiana's Mississippi Delta region, or Tumacacori National Historical Park, which encompasses three physically separate units which preserve three Spanish colonial missions. Similarly, Bandelier National Monument and Acadia National Park also manage lands that are not physically connected to the main park land base.

## Alternative 4 - Federal land transfers, contiguous property, Grewe site, and Adamsville

Federal acquisition of the Adamsville site satisfies boundary adjustment criterion #1) **acquiring significant resources** related to the purposes of the park.

Acquiring significant resources: Adamsville is an impressive archeological resource

from the Hohokam Classic period, encompassing one large platform mound, at least one compound, a ballcourt and at least 44 other mounds some of which are likely to be houses or other structures. The richness of the resource has been recognized by its placement on the National Register of Historic Places. It is the second largest habitation site located along the Canal Casa Grande, second to the Grewe-Casa Grande complex that includes Casa Grande Ruins. Although the site has been known for years, only parts of it have been examined. A more thorough assessment was accomplished by NPS archeologists for the completion of this report.

Other alternatives for management: Approximately 80 percent of the site is Arizona state school trust lands, and is mostly well preserved, although a privately owned portion of the site was destroyed while NPS archeologists were at work on the study. However, the state does not manage the site to preserve it for the enjoyment of present and future generations. There are no education or interpretive opportunities at the site. NPS management would facilitate public education about the Adamsville site through interpretive talks, wayside exhibits and other interpretive programs. Moreover, NPS possesses the necessary expertise in Hohokam culture and preservation of prehistoric sites to ensure that Adamsville is protected for present and future generations

**Administrative feasibility:** Adamsville is located approximately 4 miles from the headquarters of Casa Grande Ruins. Its distance from Casa Grande Ruins and its accessibility from Highway 287 facilitate management of the site by NPS and opportunities for public education about Adamsville.

#### **Land Acquisition Priorities And Estimated Costs**

The National Park Service has identified 80 acres of the west boundary property as the most important parcel to obtain for boundary expansion purposes because of the land's proximity to Casa Grande Ruins, the existence of im-portant resources, and the high likelihood that the property will be developed in the near future.

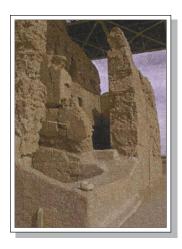
The National Park Service considers 125 acres of the Adamsville site to be the second most significant property to acquire because of the significance of the resources there and the relationship of the site to Casa Grande Ruins.

The National Park Service has identified 45 acres of the Grewe site to be its third priority for land acquisition because of the site's archeological significance and its relationship to Casa Grande Ruins.

The National Park Service estimates that land acquisition costs will range from \$6,000 to \$8,000 per acre, with the higher amount likely to be required for acquiring smaller parcels.



Above, Illustration of Red-on Buff Pottery From 12th Century Classic Period



#### Conclusion

Decisions about management of national parks, including whether they ought to be expanded, have important, sometimes overwhelming impacts on the communities that surround the parks. For Coolidge, Casa Grande Ruins is an important tourist attraction and an important element of the town's economic vitality.

In 2001, over 132,000 people visited Casa Grande Ruins, a considerable visitation number for a relatively small park. A park service model designed to demonstrate the economic impacts of park visitation estimates that visitation to Casa Grande Ruins generates \$3.3 million in spending, which supported \$3.2 million in sales, \$1.15 million in personal income and an estimated 86 jobs.

As these numbers demonstrate, Casa Grande Ruins is an important contributor to the local economy of Coolidge. But Casa Grande Ruins is also an important element of the Coolidge community's identity, as reflected in local support for the Ruins and possible expansion of the park.

All of the alternatives studied in this report offer the opportunity to enhance Casa Grande's status as an internationally-known archeological resource. However, alternatives calling for significant expansion also offer an opportunity to include within Casa Grande Ruins properties that are listed on the National Register of Historic Places which are not now available for public enjoyment.

At right, roasting pit located one of the dry farming sites studied in the Resource Protection Study (NPS Photo)



#### Acknowledgements

The National Park Service wishes to thank the following individuals and organizations who have contributed to, and supported, the Resource Protection Study:

Arizona Gov. Janet Napolitano Arizona State Historic Preservation Office Arizona State Museum Ak-Chin Indian Community Coolidge City Council Florence City Council Gila River Indian Community Pinal County Salt River Pima Maricopa Indian Community Tohono O'Odham Nation Archeological Conservancy Coolidge Examiner Coolidge Women's Club National Parks Conservation Association Bonnie Bariola John Baudek Doug Craig **Bob Flatley** Henrietta Lopez Lois Lyles Phyllis Mikles Randy Rasmussen Glenn Rlce Lynn Teague Jim Walker

NPS Staff and Doug Craig from Northland Research Inc. visit one of the sites analyzed in the Resource Protection Study. From left to right, Ron Beckwith, Don Spencer, Doug Craig, Trinkle Jones, Dave Winchester, Cheryl Eckhardt & Dawn Daw.

Wilbur Wuertz





The following NPS personnel contributed to the Resource Protection Study and Environmental Assessment:

Don Spencer, Superintendent Ron Beckwith Laura Bergstresser Karen Breslin Peggy Carter Dwayne Collier Dawn Daw Cheryl Eckhardt Kevin Harper Glenda Heronema Jeff Heywood Jolene Johnson Trinkle Jones Larry Laing Diana Mills Suzy Stutzman Barbara Sulhoff Dave Winchester



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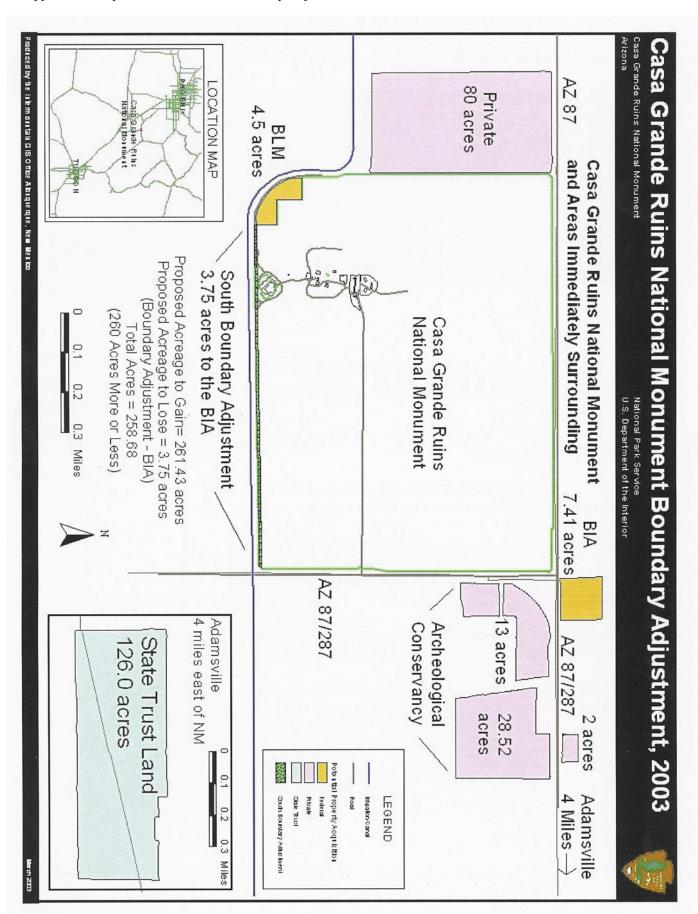
Or

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Western Archeological and Conservation Center
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# **Appendices**

- 1. Map Of Alternatives
- 2. Compilation Of Public Comments Offered During Resource Protection Study Public Meetings
- 3. Bibliography
- 4. Analysis Of Properties Considered For Boundary Expansion
- **5. Simulation Of Potential Impacts To Casa Grande Ruins West Boundary View From Development**
- 6. Letters And Resolutions In Support Of Resource Protection Study



## **Appendix 2 Compilation of Public Comments Provided During Resource Protection Study**

(comments are paraphrased from statements made in public meetings)

Comments Support Innovative Interpretation, Education; NPS Management Of Sites; Partnership Efforts

- The continued importance of the canal system that has facilitated human settlement of the area.
- The continuity of Native American presence and culture in the area and the relationship to water.
- The desire to see the park service halt the use of "Pima" and instead use the traditional name, O'odham, to refer to the four tribes.
- The use of "Hohokam" to describe the people who inhabited the Great House as "an artificial period description" because area tribes are their descendants.
- The importance of involving local Native Americans in writing and clarifying the Hohokam history in the area for Casa Grade Ruins' interpretive programs.
- The role of European-Americans in the area's irrigation history.
- Water as an important interpretive theme that ties cultures together.
- Importance of looking at other lands for resource protection and determining what limits to set.
- Importance of meeting with local communities to identify significant resources and possible boundaries, including the Gila River Indian Community north of the Ruins and specifically the Blackwater Community.
- Possibility of a regional bicycle path that would tie important archeological sites together.
- Improvement of the appearance of the north entrance into Coolidge.
- Possible restoration of a pit house as an interpretive tool.
- Importance of partnership between Coolidge and NPS.
- Need for expansion of park's interpretive programs.
- Possible collaboration between NPS and Coolidge toward economic enhancement, resource protection and visitor education.
- Interest in identifying economic effects of Casa Grande Ruins through economic simulations.
- Importance of conducting an historic landscape study, that could include entire canal system and would help determine time and geographical boundaries of area to be interpreted.
- Need for design guidelines for the primary entrance into the city from the North.
- Desire to make Coolidge a destination point for tourists.
- Concern about looting and vandalism of sites newly opened to the public.
- Importance of protecting and preserving significant sites and providing access to them for visitors.
- Possible reconstructions (of prehistoric structures) and other creative methods of interpretation.
- Concern about impacts of excavation of archeological sites on preserving and maintaining those sites.

#### Appendix 2 Compilation of Public Comments Provided During Resource Protection Study

(comments are paraphrased from statements made in public meetings)

- Desire that any monument expansion include expanded interpretive efforts to include history of Coolidge and Native American history in the area.
- Belief that reconstruction of archeological features would be more acceptable to the local community than excavation.
- Support for the importance of respecting the living culture.
- Concern about disturbing prehistoric artifacts.
- Importance of sensitivity to cultural concerns.
- A desire to re-align Highway 87 and Arizona Blvd. to expand the boundaries of Casa Grande Ruins to include sites located near the Wal-Mart.
- A desire to locate "sensitive" development away from Casa Grande Ruins rather than high-rise hotels surrounding the Ruins.
- Support for a linear series of sites, or "string of pearls," that would extend from Coolidge to Florence.
- Support for creation of a greenbelt.
- Support for management of Casa Grande Ruins by Native Americans.
- Support for expansion of visitor opportunities by conducting backcountry tours of compounds and by reconstructing a pit house near the Wal-Mart.
- Support for NPS carrying out its mission to educate visitors, especially children, that artifacts must be left in place.
- Concern about protecting archeological sites from looting.
- Support for excavation of ballcourts.
- Support for excavation of a pit house.
- Support for excavation of a portion of the historic canal.
- Interest in state/NPS partnership.
- Support for NPS management of additional sites.
- Belief that expansion only first step; interpretation of sites in an entertaining manner also important.
- Belief that more entertaining ways of interpreting sites is important rather than relying on written materials.
- Support for interactive interpretation of sites.
- Belief that partnerships are essential to protecting sites.
- Support for some excavation of sites and others left in natural site; support for NPS acquisition of Archeological Conservancy sites so that sites can be interpreted.
- Concern about protecting view from Ruins.

# Appendix 2 Compilation of Public Comments Provided During Resource Protection Study (comments are paraphrased from statements made in public meetings)

- Support for partnership between Coolidge and NPS to ensure compatible development.
- Support for use of zoning and signage requirements to ensure compatible development.
- Support for completion of Coolidge master plan.
- Support for protection of related Hohokam sites, rather than Casa Grande in isolation.
- Support for prioritizing sites for protection and identifying all significant sites.
- Support for evaluating the cultural landscape to determine the scope of the study.
- Support for protecting private sites first because state trust lands not as pressured by development.
- Belief that not realistic to survey all sites in the Hohokam system.
- Support for working with Gila River Indian Community in interpreting the Hohokam system.
- Support for bringing state land department into discussions regarding expansion.
- Support for surveying all of state lands with possible opportunity to decide how to manage them.
- Support for greenbelt, other recreation opportunities in the Coolidge-Florence corridor.
- Belief that greater public involvement is necessary in the Resource Protection Study.
- Support for using local TV channel as way of spreading the word.
- Support for use of archeological fair to inform public about the Resource Protection Study.
- Concern about a lack of support for monument expansion.
- Interest in the possibility of Wal-mart providing interpretive space for area's archeological resources.

#### Abbott, David R.

1999 Ceramic Markers of Ancient Irrigation Communities: Research Report to Accompany the South-west Parks and Monuments Association (now Western National Parks Association) Traveling Exhibit: *Pottery Pathways — Hohokam Lifeways*. Ms. on file, Western Archeological and Conservation Center, National Park Service, Tucson.

#### Clemson, A. Berle

1992 Casa Grande Ruins National Monument, Arizona: A Centennial History of the First Prehistoric Reserve 1892-1992. United States Department of the Interior, National Park Service.

#### Cordell, Linda

1997 Archaeology of the Southwest. Academic Press, Inc., New York.

#### Craig, Douglas B.

2001 *The Grewe Archaeological Research Project Volume 1: Project Background and Feature De-scriptions.* Anthropological Papers No. 99-1. Northland Research, Inc., Flagstaff.

#### Crown, Patricia L.

1987 Classic Period Hohokam Settlement and Land Use in the Casa Grande Ruin Area, Arizona. *Jour-nal of Field Archaeology* 14(2):147-162.

#### Czarzasty, John, Peterson, Kathleen, and Glen Rice

2003 The Casa Grande Boundary Survey: A Preliminary Report, draft ms. on file at NPS WACC Tucson.

#### Fish, Paul R.

1989 The Hohokam: 1000 Years of Prehistory in the Sonoran Desert. In *Dynamics of Southwestern Prehistory*, edited by Linda S. Cordell and George J. Gumerman, pp. 16-63. Washington: Smithsonian Institution Press.

#### Fish, Suzanne K., and Gary P. Nabhan

1991 Deserts as Context: The Hohokam Environment. In *Changing Views of the Hohokam*, edited by George J. Gumerman, pp. 29-60. Albuquerque: University of New Mexico Press.

#### Fish, Suzanne K., Paul R. Fish, and John H. Madsen

1992 The Marana Community in the Hohokam World. Anthropological Papers No. 56. University of Arizona Press, Tucson.

#### Lee, Ronald F.

2001 The Antiquities Act of 1906. http://www.er.nps.gov/aad/pubs/INDEX.HTM

#### Little, Barbara, and Erika Martin Seibert, Jan Townsend, John H. Sprinkle, Jr., John Knoerl,

2000 Guidelines for Evaluating and Registering Archeological Properties. National Register Bulletin No. 36, U.S. Department of the Interior, National Park Service.

#### Teague, Lynn S.

1984a The Organization of Hohokam Economy. In *Synthesis and Conclusions*, pp. 187-249. Hohokam Archaeology Along the Salt-Gila Aqueduct, Central Arizona Project, vol. 9, edited by L.S. Teague and P.L. Crown. Archaeological Series No. 150. Arizona State Museum, University of Arizona, Tucson.

1984b Settlement and Population. In *Synthesis and Conclusions, pp.* 141-154. Hohokam Archaeology Along the Salt-Gila Aqueduct, Central Arizona Project, vol. 9, edited by L.S.Teague and P.L. Crown. Archaeology Series 150. Arizona State Museum, University of Arizona, Tucson.



## **Appendix 4: Analysis of Properties Considered for Boundary Expansion**

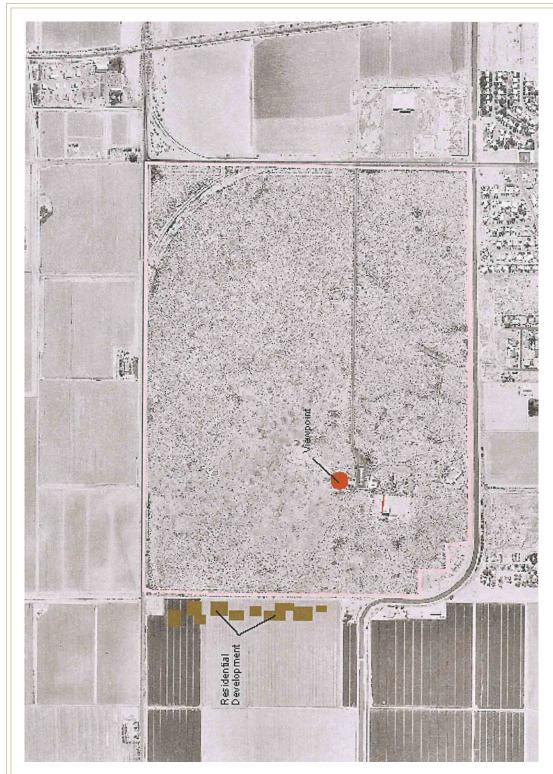
site	ownership	thematic relationship to CAGR	distance from CAGR	acreage	contain significant resources or opportunities for public enjoyment?
West boundary lands	private	classic period and preclassic irrigation community- includes portions of Casa Grande community not included within park boundaries	adjoins Casa Grande's west boundary	160 acres total; 80 acres recommended for acquisition	Yes; evidence of residential settlements; sherds, shell, flaked and ground stone artifiacts that are artifacts from the Casa Grande community
BLM parcel	federal govemment - BLM	land originally included within Casa Grande Ruins boundaries	located at Casa Grande's southwest corner boundary	4.75 acres (not including land occupied by Pima Lateral Canal)	Not Known
Horvath (AZ U:14:115)	federal government; Bureau of Indian Affairs	classic period Hohokam community	located adjacent to Casa Grande's northeast border on the north end of Arizona 87	7.4 acres	Yes; investigation of the site by Northland Research Inc. in 1996 indicated that the site contained 81 cultural features, including adobe walls, canals, pit houses, borrow and roasting pits, human burials and cremations. (BIA; Northland, Woodson 1996)
Grewe sites (Walmart, Faul & Cole properties)	private; Archeological Conservancy	pre-classic period Hohokam community; irrigation community preceding Casa Grande Ruins settlement	Walmart property located immediately adjacent to Casa Grande Ruins; Cole and Faul properties are located within 2 miles of Casa Grande Ruins	Walmart: 13 acres Cole: 2 acres Faul: 30 acres	Yes; investigation of portions of the Grewe site by Northland Research Inc. between 1995-1997 revealed hundredss of houses, ballcourts and large earthen ovens (hornos).
Adamsville Ruin (AZ U:15:1	private; state of Arizona school trust lands	classic period Hohokam community	4 miles east of Casa Grande Ruins	153 total; 125 acres considered for acquisition	Yes; investigation of the site by the Western Archeological and Conservation Center identified a large platform mound, at least one compound, a ballcourt and at least 41 mounds. Site is listed on National Register of Historic Places.

Necessary to protect critical Casa Grande resources?	would address operation mgm't issue?	feasible to adminster?	Other alternatives for site man-agement adequate?
Yes; Property is immediately adjacent to the Great House and within its viewshed; any development would affect the visitor experience; some types of development could degrade the park, e.g., noise or pollution from industrial facilities	No	Yes; property adjoins monument boundary; potential willing seller	No; Site vulnerable to development; proposed for development of correctional facility in 1999
No; land was within Casa Grande boundaries; withdrawn in 1926 for construction of Pima Lateral Canal	Yes; Restores Pima Lateral canal as Casa Grande boundary; Bureau of Indian Affairs would obtain 3.75 acres from monument's south boundary to accommodate widening of Pima Lateral Canal	<b>Yes</b> ; property adjoins park boundary and was part of Casa Grande Ruins until 1926	No; Is not managed by BLM in ways consistent with park purposes
No	No	Yes; property is adjacent to Casa Grande Ruins and is thematically related to park purposes	<b>No</b> ; Is not managed by BIA to provide opportunities for public enjoyment related to purposes of Casa Grande Ruins
No	No	<b>Yes</b> , properties are within close proximity to Casa Grande Ruins and are thematically related to park purposes	No; Is not managed by Archeological Conservancy to provide opportunities for public enjoyment related to purposes of Casa Grande Ruins
No	No	Yes, property is approximately 4 miles from park headquarters; NPS manages other units with holdings that are not contiguous	<b>No</b> ; it is not managed by Arizona to provide opportunities for public enjoyment related to purposes of Casa Grande Ruins

## **Appendix 4: Analysis of Properties Considered for Boundary Expansion**

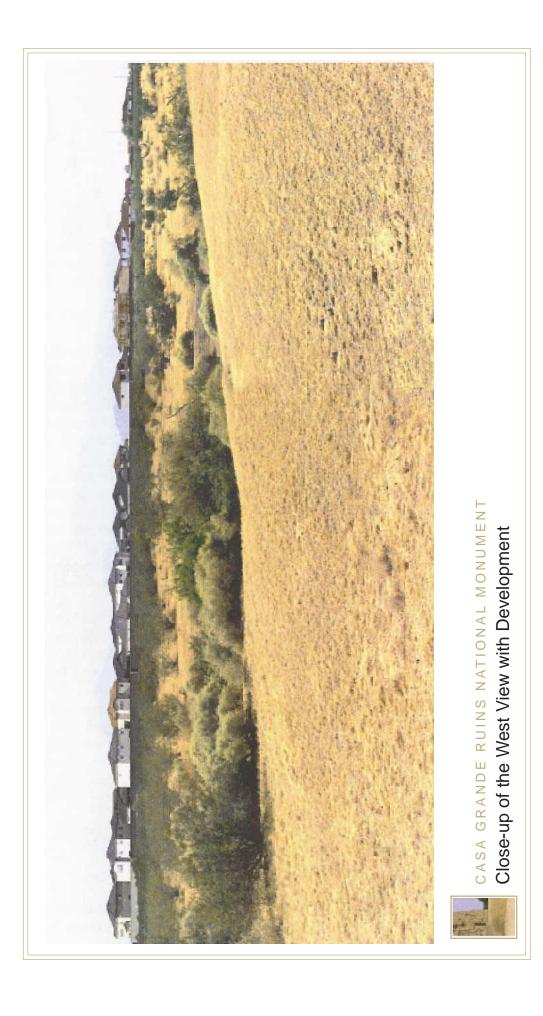
site	ownership	thematic relation ship to CAGR	distance from CAGR	acreage	contain significant resources or opportunities for public enjoyment?
AZ U:15:101	state	classic period Hohokam	approx. 13 miles	.05	Yes; known rock art site and artifact scatter
AZ U:15:45	state/private	Hohokam uncertain period	approx. 13 miles	160 acres	Yes; Artifacts related to agricultural production, including griding stone, found at site.
AZ U:15:46	state/private	Hohokam uncertain period	approx. 11 miles	45 acres assessed	<b>Yes</b> ; up to 250 rock pile sites related to dry irrigation farming
AZ U:15:85 (located between Florence-Casa Grande Canal and the Central Arizona Project Canal near Florence)	state of Arizona school trust lands	sedentary and classic period Hohokam	approx. 11 miles	approx. 5.8 acres	Yes; site contains a trash mound and a structural mound but has been disturbed in places
Bisnaga Ruins (AZ U:15:123 (ASM)	private	classic period Hohokam	3.6 miles	23 acres	Not Known; subsurface testing required; surface artifacts destroyed
AZ U:15:86	Arizona	sedentary and classic period Hohokam	located near Florence, approximately 11 miles from Casa Grande Ruins	.05 acre	Probably; food preparation and trash disposal sites; possibly housing area; subsurface testing required to know more

Necessary to protect critical Casa Grande resources?	would address operat'l or mgm't issue?	feasible to adminster?	Other alternatives for site man-agement adequate?
No	No	No; site is located northeast of Florence; distance from Casa Grande Ruins makes it infeasible to administer at this time.	n/a
No	No	No; site is located northeast of Florence; distance from Casa Grande Ruins makes it infeasible to administer at this time.	n/a
No	No	No; some portions of the site extend northeast of Florence along the Canal Casa Grande; even portions located adjacent to the town of Florence would be difficult to administer at this time because of the distance from Casa Grande Ruins.	n/a
No	No	<b>No</b> ; site is located Florence; distance from Casa Grande Ruins makes it infeasible to administer at this time.	n/a
No	No	n/a	n/a
No	No	No; site is located northeast of Florence; distance from Casa Grande Ruins makes it infeasible to administer at this time.	n⁄a



CASA GRANDE RUINS NATIONAL MONUMENT Arial View of Simulation

In an effort to better understand how the potential development of lands on Casa Grande Ruins west boundary might affect the view from within the park, and the visitor experience, the National Park Service generated computer images that simulate what potential development might look like (these images are not based on actual development proposals). To simulate the effect of development, the park service picked a location within the park (the red dot on the map above) from which visitors would be viewing the sur-rounding landscape and laid in images of houses and other buildings to simulate the effect of development on the view. The image on the opposite page is a close-up of how a housing development might look when viewed from within the monument.





#### STATE OF ARIZONA

JANET NAPOLITANO GOVERNOR

# OFFICE OF THE GOVERNOR 1700 WEST WASHINGTON STREET, PHOENIX, AZ 85007

MAIN PHONE: 602-542-4331 FACSIMILE: 602-542-7601

April 14, 2003

Mr. Don Spencer, Superintendent Casa Grande Ruins National Monument 1100 Ruins Drive Coolidge, Arizona 85228

Dear Superintendent Spencer:

As the State of Arizona continues to build a strong and viable economy, it is important for us as leaders not to compromise the very values that make Arizona special not only to its citizens, but also to the nation. The rich fabric of our State is interwoven with majestic landscapes, snow capped peaks, beautiful lakes and rivers and the diverse topography of the Sonoran desert. These places are present today because those who came before us also placed a value on these resources and protected them for all future generations to enjoy.

In this spirit, the State of Arizona supports the efforts of the National Park Service to protect irreplaceable natural and cultural resources historically and thematically associated with Casa Grande Ruins National Monument through park expansion. Further, the State supports the park's expansion to include state trust land known as Adamsville, a prehistoric habitation site listed on the National Register of Historic Places that includes a platform mound, at least one compound, a ball court, and several mounds some of which are architectural. This most precious parcel of land would be best entrusted to Casa Grande Ruins National Monument.

We understand that the United States cannot acquire property from the state of Arizona as authorized under existing state statute. We do, however, support the sale of this property at fair market value to the United States by use of friendly condemnation, if necessary, to resolve the conflicting acquisition authorities.

The expansion of Casa Grande Ruins National Monument by approximately 125 acres would protect these fragile and irreplaceable prehistoric fabrics of our Arizona history, which is of tremendous importance to all people.

Yours very truly,

Janet Napolitano

Governor

Cc: Senator John McCain Congressman Rick Renzi

#### **RESOLUTION NO. 01-15**

A RESOLUTION OF THE MAYOR AND COMMON COUNCIL OF THE CITY OF COOLIDGE, COUNTY OF PINAL, IN SUPPORT OF THE CASA GRANDE RUINS NATIONAL MONUMENT STUDYING THE POSSIBILITY OF EXPANDING THE MONUMENT OR OTHERWISE PROTECTING SENSITIVE ARCHAEOLOGICAL SITES ASSOCIATED WITH THE HOHOKAM CULTURE AND THE PREHISTORIC CASA GRANDE COMMUNITY THAT ARE OUTSIDE THE CURRENT MONUMENT BOUNDARY.

WHEREAS, the National Park Service is studying the possibility of expanding the monument to include other sensitive archeological sites associated with the Casa Grande Community, and to preserve the historic integrity including the viewshed and vistas of the monument; and

WHEREAS, the City of Coolidge supports alternatives that will preserve the historic integrity of the Casa Grande community including archaeological sites, views, and vistas that will ensure the long term integrity of the monument and its economic value to the City of Coolidge.

NOW, THEREFORE, BE IT RESOLVED THAT the Mayor and Common Council of the City of Coolidge, Pinal County, are in support of the Casa Grande Ruins National Monument studying the possibility of expanding the monument or otherwise protecting sensitive archaeological sites associated with the Hohokam culture and the prehistoric Casa Grande community that are outside the current monument boundary.

Passed and adopted by the Mayor and Common Council of the City of Coolidge this 10th day of September, 2001.

Mayor

APPROVED AS TO FORM:

CltvClerk

ATTEST:

#### TOWN OF FLORENCE

#### **RESOLUTION NO. 804-02**

A RESOLUTION OF THE MAYOR AND COMMON COUNCIL OF THE TOWN OF FLORENCE, COUNTY OF PINAL, IN SUPPORT OF THE CASA GRANDE RUINS NATIONAL MONUMENT STUDYING THE POSSIBILITY OF EXPANDING THE MONUMENT OR OTHERWISE PROTECTING SENSITIVE ARCHAEOLOGICAL SITES ASSOCIATED WITH THE HOHOKAM CULTURE AND THE PREHISTORIC CASA GRANDE COMMUNITY THAT ARE OUTSIDE THE CURRENT MONUMENT BOUNDARY.

WHEREAS, the National Parks Service is studying the possibility of expanding the monument to include other sensitive archeological sites associates with the Casa Grande Community, and to preserve the historic integrity including the view shed and vistas of the monument; and

WHEREAS, the Town of Florence supports alternatives that will preserve the historic integrity of the Casa Grande community including archeological sites, views, and vistas that will ensure the long term integrity of the monument and its economic value to the Town of Florence.

NOW, THEREFORE, BE IT RESOLVED THAT the Mayor and Common Council of the Town of Florence, Pinal County, are in support of the Casa Grande Ruins National Monument studying the possibility of expanding the monument or otherwise protecting sensitive archaeological sites associated with the Hohokam culture and the prehistoric Casa Grande community that are outside the current monument boundary

**PASSED AND ADOPTED** by the Mayor and Common Council of the Town of Florence this 6<sup>th</sup> day of May, 2002.

Patsy Williams, Mayor

ATTEST:

Lisa Garcia. Town Clerk

APPROVED AS TO FORM

John R. Wildermuth, Town Attorney

#### CENTRAL ARIZONA ASSOCIATION OF GOVERNMENTS

#### RESOLUTION NO. 2002-02

A RESOLUTION OF THE REGIONAL COUNCIL OF CENTRAL ARIZONA ASSOCIATION OF GOVERNMENTS, REPRESENTING THE 14 COMMUNITIES AND 2 COUNTIES OF GILA AND PINAL, SUPPORTING THE CASA GRANDE RUINS NATIONAL MONUMENT STUDYING THE POSSIBILITY OF EXPANDING THE MONUMENT OR OTHERWISE PROTECTING SENSITIVE ARCHAEOLOGICAL SITES ASSOCIATED WITH THE HOHOKAM CULTURE AND THE PREHISTORIC CASA GRANDE COMMUNITY THAT ARE OUTSIDE THE CURRENT MONUMENT BOUNDARY.

WHEREAS, the National Parks Service is studying the possibility of expanding the monument to include other sensitive archeological sites associated with the Casa Grande Community, and to preserve the historic integrity including the view shed and vistas of the monument; and

WHEREAS, Central Arizona Association of Governments (CAAG) supports alternatives that will preserve the historic integrity of the Casa Grande community including archeological sites, views, and vistas that will ensure the long term integrity of the monument and its economic value to the CAAG region;

WHEREAS, expanding Casa Grande Ruins National Monument would enhance the regions many archaeological sites by providing educational and tourism opportunities for the entire region; and

WHEREAS, CAAG recently completed the CAAG Regional Tourism Marketing Strategy under an Economic Development Administration (EDA) grant which emphasizes marketing tourism through related sites of interest.

NOW, THEREFORE, BE IT RESOLVED THAT the Regional Council of Central Arizona Association of Governments, is in support of the Casa Grande Ruins National Monument studying the possibility of expanding the monument or otherwise protecting sensitive archaeological sites associated with the Hohokam culture and the prehistoric Casa Grande community that are outside the current monument boundary.

**PASSED AND ADOPTED** by the Regional Council of Central Arizona Association of Governments this 10th day of July, 2002.

loe M. Sanchez, Regional Council Chair

ATTEST:

Maxine L. Leather, Executive Director

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CASA GRANDE RUINS NATIONAL MONUMENT

### CITY OF COOLIDGE HISTORIC PRESERVATION/CERTIFIED LOCAL GOVERNMENT COMMISSION

October 21, 2002

The Historic Preservation/Certified Local Government Commission of the City of Coolidge, Arizona, having reviewed the Preliminary Boundary Protection study of the National Park Service has resolved to support the expansion of responsibility of the National Park Service to include sites not now in their area of protection.

The Casa Grande Ruins is the 4<sup>th</sup> oldest unit in the National Park System, founded 1892, and sits within the area of the peak of the prehistoric Casa Grande-Grewe sites of the ancient HoHoKam culture. Expansion of responsibility to include elements of this civilization and of the oldest prehistoric canal system in the Middle Gila Valley is important to the cultural heritage of future generations of the people of Coolidge.

We believe the protection of archaeological resources in and around the Casa Grande Ruins is important to the cultural and economic future of the communities growing near this archaeological site and we urge private and governmental agencies to support conservation of all elements relating to their preservation.

Sincerely.

Bruce West Chairman